WHAT IS CLAIMED IS:

1. A composite sensor device including an angular velocity sensor and an acceleration sensor comprising:

a substrate;

a displacement portion forming member disposed on a substrate, the displacement portion forming member including a vibrator for an angular velocity sensor, to be vibrated and displaced by a Coriolis force caused by an angular velocity and a movable member for an acceleration sensor, to be movably displaced by application of an acceleration, the vibrator and the movable member being spaced from each other,

a lid disposed on an upper side of the displacement portion forming member to cover and be spaced from the vibrator of the angular velocity sensor and the movable member of the acceleration sensor, and

the substrate, displacement portion forming member and the lid, defining a space for accommodating and sealing the vibrator of the angular velocity sensor and the movable member of the acceleration sensor, in such a manner that the vibrator and the movable member can be vibrated, the space being sectioned into an angular velocity sensor space for accommodating and sealing the vibrator of the angular velocity sensor and an acceleration sensor space for accommodating and sealing the movable member of the acceleration sensor which is not communicated with the angular velocity sensor space, wherein the angular velocity sensor space is sealed in a first environment and wherein the acceleration sensor space is sealed in a second, different environment.

2. A composite sensor according to claim 1, wherein each of the angular velocity sensor space and the acceleration sensor space is hermetically sealed.

3. A composite sensor device according to claim 1, wherein the vibrator of the angular velocity sensor is vibrated at a first frequency and the movable member of the

acceleration sensor is vibrated at a lower frequency and the second environment of the acceleration sensor space is such as to prevent the movable member of the acceleration sensor from vibrating at the frequency of vibration of the vibrator of the angular velocity sensor.

4. A composite sensor device according to claim 3, wherein the first environment is a vacuum state and the second different environment is an atmospheric pressure state.

5. A composite sensor device according to claim 3, wherein the first environment is a vacuum state and the second environment is a damping agent which fills the acceleration sensor space.

6. A composite sensor device according to claim 3, wherein the vibrator of the angular velocity sensor vibrates at a frequency of 1KHz or higher and the second environment is such as to prevent vibrations from the vibrator of the angular velocity sensor from being transmitted to the movable member of the acceleration sensor.

7. A composite sensor device according to any one claims 1 to 6, wherein the substrate is an SOI substrate comprising a supporting layer, an oxide layer, and an active layer laminated together, and the displacement portion forming member is made from the active layer of the SOI substrate.

8. A composite sensor device according to any one of claims 1 to 6, wherein the angular velocity sensor and the acceleration sensor have constant potential sites so that the sensors are maintained at set constant potentials, respectively, said constant potential site of the angular velocity sensor being electrically connected to the constant potential site of the acceleration sensor, and wherein a connection electrode is provided for

connecting both of the constant potential site of the angular velocity sensor and the constant potential site of the acceleration sensor to an external circuit.

9. A composite sensor device according to claim 6, wherein the angular velocity sensor and the acceleration sensor have constant potential sites so that the sensors are maintained at set constant potentials, respectively, said constant potential site of the angular velocity sensor being electrically connected to the constant potential site of the acceleration sensor, and wherein a connection electrode is provided for connecting both of the constant potential site of the angular velocity sensor and the constant potential site of the acceleration sensor to an external circuit.

10. A method of producing a composite sensor device comprising the steps of

(a) providing a substrate

(b) simultaneously forming a vibrator of an angular velocity sensor and a movable member of a acceleration sensor on a displacement portion forming member on the substrate;

(c) after step (b), disposing a lid on the upper side of the vibrator of the angular velocity sensor and the movable member of the acceleration sensor, joining the lid and the displacement portion forming member disposed on the substrate so that the vibrator of the angular velocity sensor is accommodated into an angular velocity sensor space and the movable member of the acceleration sensor is accommodated into an acceleration sensor space, and

(d) thereafter hermetically sealing the angular velocity sensor space in a first environment, then placing the acceleration sensor space in a different environment and, then hermetically sealing the acceleration sensor space.

11. A method of producing a composite sensor device according to claim 10 further comprising providing a supply passage in communication with the acceleration

sensor space; and wherein step (d) comprises placing the acceleration sensor space at the second different environmental state through the supply passage and then closing the passage to thereby hermetically seal the acceleration sensor space.

12. A method of producing a composite sensor device according to claim 11, wherein the first environment is a vacuum state and the second environment is an atmospheric pressure state.

13. A method of producing a composite sensor device according to claim 11, wherein the first environment is a vacuum state and the second environment is a damping agent which fills the acceleration sensor space.

14. A method of producing a composite sensor device according to claim 11, wherein the vibrator of the angular velocity sensor vibrates at a frequency of 1KH or higher and the second environment is such as to prevent vibrations from the vibrator of the angular velocity sensor from being transmitted to the moveable member of the acceleration sensor.

15. A method of producing a composite sensor device according to any one of claims 10-13, werein the substrate is an SOI substrate comprising a supporting layer an outside layer and an active layer laminated together and the displacement portion forming member is made from the active layer of the SOI substrate.

16. A method of producing a composite sensor device according to any one of claims 11-13, wherein the angular velocity sensor and the acceleration sensor have constant potential sites so that the sensor are maintained at set constant potentials respectively, said constant potential site of the angular velocity sensor being electrically connected to the constant potential site of the acceleration sensor and wherein a

connection electrode is provided for connecting both of the constant potential site of the angular velocity sensor and the constant potential site of the acceleration sensor to an external circuit.

17. A method of producing a composite sensor device according to claims 15, wherein the angular velocity sensor and the acceleration sensor have constant potential sites so that the sensor are maintained at set constant potentials respectively, said constant potential site of the angular velocity sensor being electrically connected to the constant potential site of the acceleration sensor and wherein a connection electrode is provided for connecting both of the constant potential site of the angular velocity sensor and the constant potential site of the acceleration sensor to an external circuit.